

WHAT IS CLAIMED IS:

1 1. A method for proactively managing a fault in a video and data network
2 comprising:
3 collecting network correlation data for the fault;
4 automatically performing a physical connectivity test of the video and data
5 network;
6 collecting physical connectivity data from the physical connectivity test;
7 automatically performing a virtual connectivity test of the video and data
8 network;
9 collecting virtual connectivity data from the virtual connectivity test;
10 automatically correlating the network correlation data, physical connectivity
11 data, and virtual connectivity data based on the fault; and
12 providing a defined resolution procedure for resolving the fault using the
13 correlated network correlation data, physical connectivity data, and virtual connectivity data.

1 2. The method of claim 1, wherein the video and data network comprises
2 a Digital Subscriber Line (xDSL) network.

1 3. The method of claim 1, wherein the video and data network comprises
2 a Very high bit rate DSL (VDSL) network.

1 4. The method of claim 1, wherein collecting network correlation data
2 comprises collecting data for upstream and downstream physical network elements from the
3 fault.

1 5. The method of claim 1, wherein collecting network correlation data
2 comprises collecting data from a root cause analysis.

1 6. The method of claim 1, wherein the physical connectivity test
2 comprises a Physical Loop Test.

1 7. The method of claim 6, wherein the Physical Loop Test is de-coupled
2 from a Plain Old Telephone Service (POTS) tool.

1 8. The method of claim 1, wherein the virtual connectivity test comprises
2 an Operations And Maintenance (OAM) test.

1 9. The method of claim 8, further comprising initiating the OAM test
2 with a service area identifier.

1 10. The method of claim 9, wherein the service area identifier comprises a
2 telephone number.

1 11. The method of claim 1, further comprising creating a repair ticket for
2 the fault.

1 12. The method of claim 1, further comprising dispatching a technician to
2 fix the fault.

13. The method of claim 1, further comprising fixing the fault using the
2 pre-defined resolution procedure.